

Docket No.: 300.1126

Serial No. 10/661,530

IN THE ABSTRACT:

Please DELETE the Abstract in its entirety and substitute the attached new Abstract.

A wiring substrate with bumps protruding from a surface of the substrate covers one side of a metallic base with an electrical insulating film thereon, having open holes exposing the base, etching the base through the open holes to form concavities in the base, electroplating the interior faces of the concavities to form a barrier metal film thereon filling the concavities with a bump material by electroplating, and forming a barrier layer on the bump material in each concavity. A stack of wiring patterns is formed on the insulating film, adjacent wiring patterns being separated by a respective intervening insulating layer and being electrically connected to each other through vias in the intervening insulating layer, and to the bump material filled in the concavities. Thereafter, the base and barrier metal film are removed.